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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/603,904	06/24/2003	David J. Schuessler	33915-03410	4886

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EXAMINER

MACKEY, JAMES P

ART UNIT PAPER NUMBER

1722

DATE MAILED: 12/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/603,904

Applicant(s)

SCHUESSLER, DAVID J.

Examiner

James Mackey

Art Unit

1722

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5,21 and 22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5,21 and 22 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/1/2003.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

1. Applicant should update the status of the parent application at the beginning of the specification, including the patent number.
2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 5 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by McDowell (U.S. Patent 3,439,079).

McDowell teaches a system comprising a means for rotating a mold about at least two axes, the rotating means being a multi-axis rotational molding machine (col. 2, lines 59-60), and means for molding a material within a mold, the molding means being a two piece mold (col. 2, lines 65-66) mounted to the machine, the mold pieces matable to form a vacuum-tight seal such that means for supplying a vacuum to the mold apply a vacuum to the mold cavity (see the abstract). The system further includes means for inserting a molding material into the mold, such that the mold inherently includes a sprue opening fluidly connected to the interior of the mold, since the mold is capable of being charged automatically (col. 2, line 64). Moreover, the mold interior/cavity is inherently “sized to allow for the thickness of a liner to coat an inside surface of said mold” as claimed in claim 5 (note that claim 5 does not require means for applying the liner material). Note that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations, *Ex parte Masham*, 2 USPQ2d 1647.

4. Claims 1, 2, 4 and 5 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Giehler et al. (U.S. Patent 4,110,389; col. 2, lines 49-58; col. 4, lines 52-53; col. 5, lines 28-31).

Giehler et al. clearly teach a system comprising a multiaxis rotational molding machine, and a two-piece mold 1a, 1b matable to form a vacuum-tight seal along mating surfaces (with means to apply a vacuum to the mold cavity), the mold being mounted to the rotational molding machine, at least one of the mold pieces having a hemispherical shaped cavity, wherein the interior of the mold is "sized to allow for the thickness of a liner" as claimed in claim 5 (note that claim 5 does not require means for applying the liner material). Note that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations, *Ex parte Masham*, 2 USPQ2d 1647.

5. Claims 1, 2 and 5 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Sugalski (U.S. Patent 5,356,589).

Sugalski clearly teaches a system comprising a multiaxis rotational molding machine, and a multi-piece mold 32, 38, 40 matable to form a vacuum-tight seal along mating surfaces (with means to apply a vacuum to the mold cavity, col. 4, line 2), the mold being mounted to the rotational molding machine, wherein the interior of the mold is "sized to allow for the thickness of a liner" as claimed in claim 5 (note that claim 5 does not require means for applying the liner material). Note that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations, *Ex parte Masham*, 2 USPQ2d 1647.

6. Claims 1, 3 and 5 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Manchak, Jr. et al. (U.S. Patent 5,156,818; Figures 1 and 2).

Manchak, Jr. et al. clearly teach a system comprising a biaxial rotational molding machine, a two-piece mold 26, 28 mounted to the rotational molding machine, and a sprue opening fluidly connected to the mold interior (col. 5, lines 39-47; col. 7, lines 63-68), wherein the interior of the mold is "sized to allow for the thickness of a liner" as claimed in claim 5 (note that claim 5 does not require means for applying the liner material). Note that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations, *Ex parte Masham*, 2 USPQ2d 1647.

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over McDowell (U.S. Patent 3,439,079).

McDowell discloses the rotational molding system substantially as claimed, except for one piece of the mold having a hemispherical cavity shape. However, rotational mold pieces having a hemispherical cavity shape are notoriously well known and conventional in the art for producing rotationally molded products including a hemispherical shape, and it would have been obvious to one of ordinary skill in the art at the time of the invention to modify McDowell by providing one piece of the mold with such a conventional hemispherical cavity shape in order to rotationally mold a product having a corresponding shape. Moreover, providing the mold cavity with any desired shape, dependent only upon the desired shape of the molded product, would have been obvious and within the general level of skill in the art, since it has generally been recognized that a change in shape without affecting the functioning of the part would have been within the level of ordinary skill in the art, *In re Dailey et al.*, 149 USPQ 47; *Eskimo Pie Corp. v. Levous et al.*, 3 USPQ 23, especially in view of the fact that the shape of the molded product is dictated by the shape of the mold cavity.

10. Claims 3, 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over any one of McDowell (U.S. Patent 3,439,079; the abstract), Giehler et al. (U.S. Patent 4,110,389; col. 2, lines 49-58; col. 4, lines 52-53; col. 5, lines 28-31), Sugalski (U.S. Patent 5,356,589; col. 4, line 2), Quraishi (U.S. Patent 4,146,565; col. 4, lines 51-56 and 63-66) and Lin (U.S. Patent 5,035,601; col. 3, lines 5-10), in view of either Gilman, Jr. (U.S. Patent 4,836,963; the abstract; col. 5, lines 18-19) or Formo (U.S. Patent 3,652,368; col. 2, line 31; col. 6, lines 1-6 and 14-17).

Each of McDowell, Giehler et al., Sugalski, Quraishi and Lin discloses a rotational molding system substantially as claimed, including means for rotating a mold about at least two axes, means for molding a material within the mold and means for supplying vacuum to the

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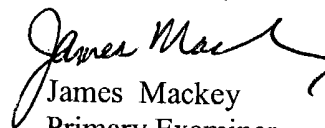
mold, except for means for inserting at least two separate materials into the mold. Gilman, Jr. and Formo each discloses a biaxial rotational molding system including means for inserting at least two separate materials into the mold. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify any one of McDowell, Giehler et al., Sugalski, Quraishi and Lin by providing means for inserting at least two separate materials into the mold, as disclosed in either Gilman, Jr. or Formo, in order to form a multi-layer product.

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Mackey whose telephone number is 571-272-1135. The examiner can normally be reached on M-F, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ben Utech can be reached on 571-272-1137. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



James Mackey
Primary Examiner
Art Unit 1722

12/10/04

jpm
December 10, 2004